5/047/036

## THE NATIVE ASPHALT COMPANY

136 East South Temple Salt Lake City, Utah 84111

3-16-92

University Club Building, Suite 1750 (801) 532-7510

DIVISION OF OIL GAS & MINING

D. Wayne Hedberg Division of Oil Gas and Mining 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203

RE: Water Quality Degradation/Diversion Ditch

Dear Wayne:

The issue of runoff water flowing over the mine area is an issue we have spent much time trying to resolve. The construction of the dam and water system was successful initially but long term the system failed and compounded our problems. We believe that a skimming and ponding effort doesn't solve our long term problem of water in the mine area.

I have been in contact with Aztec Pipe in Vernal and Amcor in Salt Lake and with their help developed a plan that should insure success of a water delivery system and eliminate concern of water in the mine and water quality degradation.

We propose that the present dam area be cleaned and a diversion ditch be channeled. The diversion ditch would cover approximately 10 X 5 feet and would be lined with clay and cobble sized rock (rip-rap). At the end of the ditch a corrugated steel floodgate would be installed to capture water from the ditch flowing through a 10 inch corrugated pipe attached to the floodgate and then into a 6 inch PVC pipe that would extend above ground for a distance of approximately 400 feet. The water runoff would then discharge into the natural drainage below the mine area.

This plan would eliminate any dams and would carry water past the mine site without water quality degradation. We would enact this plan prior to any additional mining on the property.

I am enclosing diagrams of the floodgate proposed for use. Should you have any question regarding this plan, then phone me or Sam Arentz at the above phone number.

Mark F. Lindsey Secretary

P.O. Box 868 Bountiful, Ut 84011  Tel: 801-298-7628  Date: 3-16-92  Fax: 801-292-8821  MESSAGE:  We will have a TRUCK in the Vernal and  Lintal Caenty Area - Week of 3-22-92  Please let us know it we can help you.  PAGES TO FOLLOW 3								
FAX MESSAGE	FAX MESSAGE	FAX MESSAGE						
SIDE	TEW	FRONT VIEW						
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Section II - CSP COUPLING SYSTEMS

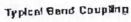
## Field Joints for Corrugated Steel Pipe

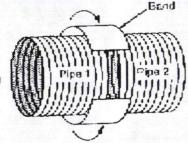
The functional requirements for pipe joints are specified in the AASHTO Bridge Design Specification, Section 2.23.3. The design of field joints using these criteria is covered in Chapter 6.

A wide variety of pipe joints are available for field cornecting lengths of corrugated steel pipe. The following drawings illustrate and define the standard joints which are tabulated in Table 1-10.

## CSP FLELD JOINTS

Type-Band Coupling

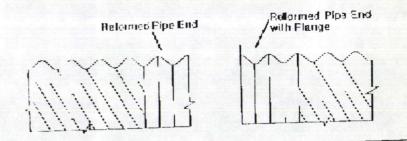




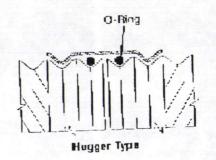
- 1. The most common CSP Joint uses a band around the pipe joint.
- 2. The band is drawn and secured on the pipe by connecting devices.
- 3. The pipe ends may be identical to the rest of the pipe burrel (plain end ), or in the case of helical pipe, the pipe ends at joints may be reformed to an annular retrugation of flange (reformed ends).
- 4 Gaskels of three types are used according to bant types; o-ring, sleeve type of mastic.

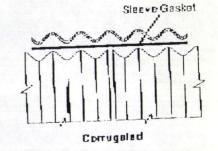
Table 1-10

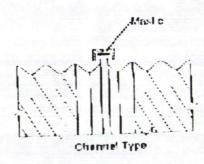
Fige C1 Band it Section		Ongles	Poli Bolt E Shap	Wedge Lock	Gardets		Ape Ind			
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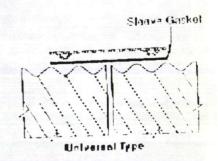


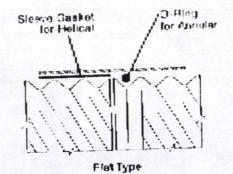
## Standard CSP Band Types

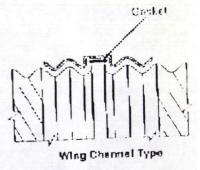












When gaskets are required, they are placed as shown.